

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

PROJECT MAC

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The Calcomp plotter as an output device

in TS and LISP

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T3 plotter routines.

- (1) CHAP FLOT (see AI Memo. # 125) has been modified for TP. [it may be found on MS4 with the non-T3 version].

The following changes should be noted:

OPNPRK (now called PLTPRK in the non-T3 CHAP FLOT), SWFLT (which is not needed since PLOTG can be called recursively), PF (ditto), LNUFF and LNPUPF (as the TP system does the buffering) do not exist in the T3 version. CRCHRN, now called PLTCHN (in both T3 and non-T3 versions) does exist.

The command `ifl# ...` (go to effective address at process time) still exists, but in T3 returns with "POPJ P", rather than `JUST 12, @ PLTPRK`. The character codes `#` and `288` (lower case `g`) respectively OPEN and CLOSE the plotter.

- (2) CHAPPL SCOPE may soon be also so modified for T3.
- (3) SCOPE FLOT is unchanged.
- (4) None of the above T3 routines can be used easily at present due to the lack of a T3 STINK.

LISP plotter commands.

The plotter version of T3 LISP is on the disk and may be loaded by `PLISP N`. The non-T3 version is on MS4 as `PLISP`.

The LISP functions to use the plotter are as follows:

- (PLOT n). Same as calling PLOTG with n in accumulator C (See AI. Memo. # 125). Returns T except if n = `#` or `288`, in which case it will return NIL if the plotter is not open after the command has been executed.
- (GLNGTH n). Same as calling GLNGTH with n in accumulator C. Returns a non-LISP number.
- (TPL). Opens plotter and initializes for plotting display lists. Returns 1 unless plotter is busy.
- (PLOTLIST arrayname) [SUPL]. Plots the display list which is in the array. Returns NIL if (GET arrayname (QUOTE SUPL)) is NIL. Otherwise returns as a LISP number the last location from which it obtained a scope word.

The display list is assumed terminated by a stop flag, a command to enter an illegal mode, or a command to enter vector continue mode (which it doesn't know about).

(NEXTPLOT). Moves the paper to an empty portion after a "PLOTLIST". In addition, the plotter may be used as an output device. It can be turned on by a P and off by a U. Before using it as such, it is advisable to execute some such sequence of commands as (PLOT 11) (PLOT 10) (PLOT 22) to make the results more legible.